

Total No. of Questions : 5]

SEAT No. :

PA-1968

[Total No. of Pages : 2

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**S.Y. B.B.A. (Computer Application)
CA - 303 : SOFTWARE ENGINEERING
(2019 CBCS Pattern) (Semester - III)**

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) *All questions are compulsory.*
- 2) *Neat diagrams must be drawn wherever necessary.*

Q1) Attempt any EIGHT of the following.

[2×8=16]

- a) What is system?
- b) Define software?
- c) Define RAD.
- d) What is SRS.
- e) State the principles of Software Testing?
- f) What is software Reengineering?
- g) State advantages of Waterfall model.
- h) State any two types of coupling.
- i) Define an Entity.
- j) What is Pseudocode?

Q2) Attempt any four of the following.

[4×4=16]

- a) Explain various types of system.
- b) Explain different McCall's quality factors.
- c) Explain spiral model in detail.
- d) Discuss different fact finding techniques.
- e) Differentiate between White - Box and Black-Box Testing.

Q3) Attempt any four of the following.

[4×4=16]

- a) Material is issued to the department by considering whether the Material Requisition Note (MRN) is signed or not. It contains valid items or not and it is given within 8 hours or not. Draw decision table for the above case.

P.T.O.

- b) Design a Input screen layout for creating user account on Internet (with personal details, user-id and password, save, cancel commands etc).
- c) Draw decision tree for the following case:
A company gives discount on the purchase of goods depending on the sale and duration of payment:
 - i) 5% discount if order amount > 50,000.
 - ii) 3% discount if order amount between 25,000 and 50,000
 - iii) No discount if order amount < 10,000 or payment is not done within 8 days.
- d) Design an screen layout for employees salary slip.
- e) Draw ER-Diagram for “College Admission System”.

Q4) Attempt any Four of the following. [4×4=16]

- a) Draw first level DFD for Hospital Management system in which the hospital has Inpatient Department (IPD), outpatient Department (OPD) the system maintains patient records and bills of the patient.
- b) Identify all entities of online shopping system.
- c) Draw context level diagrams for online shopping system.
- d) Draw first level DFD for customer Order system.
- e) Explain elements of Data flow diagrams?

Q5) Write a short note on any Two of the following. [3×2=6]

- a) Types of Cohesion
- b) Validation and Verification Testing.
- c) Feasibility study.

